

- 53 -

Claims.

I claim:

Claim 1. The "magnetic" (magnetic) force characterized in that it is born as a result of the mutual deformations of the electric fields (of only existing electric charges) due to their relative movements.

Claim 2. New unknown force in the atom, born as a result of the mutual deformations of the existing electric fields due to the relative movement (between the nucleus and electron) according Claim 1, characterized in that said force repulses the electron from the nucleus.

Claim 3. The bases of the New Atomic Scale Physics as the clear consequences of the New Force existence according Claims 1 and 2, characterized by the following characteristics:

1).The Heizenberg Incertainty Principle is not correct because this Force permits to avoid the particle "perturbation quantum" (payed obligingly for the information according to this Principle) de facto and consequently to determine the coordinates and the speed of the particle (charged) at the same time.

2).This Force, repulsive for the electron, increasing quicker than the Coulomb force with the distance decrease from the nucleus, determines the classical force equilibrium for the electron in the atom and the fundamental discrete orbit and consequently avoids and eliminates the very abstract Quantization principle (claimed only in Atom).

3).Due to the disequilibrium, created during the atom excitation, the electron radial oscillation (around fundamental orbit or a more distant temporary orbit because of the temporary increase of the tangential speed) is born between the two radial opposed forces (of Coulomb and New), which, very differently, depend on the radius (distance from nucleus) where the electron makes the sinusoidal wave- similar movement during which there is the electromagnetic wave radiation.

4).The atom excited state is not determined by the quantum postulates of the delimiting conditions of the Schrödinger equation (Bohr's postulates) but by the existence possibility in the space of the wave of the quasi-stationary electron movement (with complete periods) with the PRECISE direction of the radial movement towards (and from) the well distant nucleus wherein the component of the New Force (in radial direction) diminishes the kinetic energy in transforming it also into the electromagnetic wave energy, radiated until the exhaustion of the radial oscillations.

5).Due to the superior order dependence of the radial speed of the electron ("oscillator") on the radius (R), the radial electron speed is stronger with increase of ΔR (radius change) (and "oscillation" amplitude) (or increase of ΔE - electric field potential energy difference) and consequently the wave energy is larger with the frequency increase.

6).The accompanying transformation of the excitation energy into the heat is, justly, due to the geometric disagreement for the stable excited state establishment

with the quasi-stationary electron movement.

7).Generally, after the oscillations in the IMMOBILE electric field direction, the electromagnetic wave creation is due, justly, to the New Force, that arises in the direction, opposite to the momentary movement of the oscillations (general unremarked condition of the energy transformation: the work against the opposite force and Le Chatelier's Principle), that proves the nonprecise character of the Maxwell's Equations.

8).The discrete spectra are only consequences of the law and real physical forces.

9).The Wave-Particle Duality does not exist and the electron is only the particle with the quantity of movement determined in each point and it is subordinated only to the real physical forces.

10).There is no some governing Probability, determinating the electron presence in such or such space spot without the real physical forces.

11).The relativistic correction of Dirac to the principal Schrödinger equation of the Quantum Mechanics is not correct and, at the end, it is only the empiric postulated correction that permits to approach to the experimental physical data.

Claim 4. The falsehood of the Theory of Relativity and its consequences /mainly for Atomic Scale (Microworld) Physics/ and New additional Basic Laws (additional Bases) for the Atomic Scale (Microworld) Physics, Cosmology (as natural Nuclear Superlaboratory) and even for the Nature (firstly serious) of the electric and gravitational fields (for Microworld included) as a result of the New Bases of the Atomic Scale (Microworld) Physics and New Force, according to claims 1-3, characterized by following characteristics:

1).As in the Atomic Scale Physics, in the Theory of Relativity, there is no event dependence on the Observer and the relativistic correction of Dirac is not correct.

2). As consequence of the false Dualism Wave-Particle, the bases of the Postulate and the consequences of Theory of Relativity are not correct and as consequence, there is no speed limitation, mass increase and length decrease at the velocities, close to those of light in situ de facto without the real physical forces, the space and the time are absolute and, particularly, the classical experiments with Michelson's interferometer, concerning the constancy of the relative velocity of Earth and the light are not correct because the shift of the interferometer fringes conducts to the automatic appearance of the additional compensation (desensitization in the case where the virtual source images have the same relative positions as the mirrors that create them and hypersensitization in the relative positions des images, opposite to those of the mirrors), because the difference of the pathways of the parallel and perpendicular beams (to the absolute Earth movement) depends on the observation point (§7).

3). There is no mass increase during the "photon" movement and consequently, the light is only the pure wave wherein the straight light trajectory in the vacuum and the light speed only depends on the electromagnetic field interactions but not on the Newton laws.

4).The $E=mc^2$ equation (E-energy, m-mass, c-light speed), the principal sequence of the Theory of Relativity and Atomic Physics is totally incorrect and, oppositely, there is the New correct Law of the Matter Conservation.

5).After the interaction of the incident light with the substance, only the secondary radiation and energy dissipation (sometimes close to zero) by the substance atoms play a role due to the interaction of the electromagnetic fields of the incident light with the substance atoms.

6).The annihilation of the electrons and positrons does not take place because the consequences of the Theory of Relativity are not correct (mass transformation into the energy, particularly), but there is only the transformation of the electron (e^-) into the neutrino (ν) and the positron (e^+) into the antineutrino ($\bar{\nu}$) WITH EQUAL MASSES.

7).The charge disappearance or birth can happen with absorption or radiation of the wave electromagnetic energy (γ - waves) with the transformations: $e^- = \nu + \gamma$ or $e^+ = \bar{\nu} + \gamma$.

8).The classical neutron contains the electron, positron, and gluon and its transformation into the proton takes place with the electron elimination (which can be transformed into the neutrino with the γ - wave energy).

9).The new particle, named the neutro (n^*), represents the naked very stable neutron without the electron, positron and gluon and it can be created from the proton in eliminating positron according to described process.

10).There is the Universal law of the transformation of the electromagnetic wave into the charge and oppositely.

11).After the Supernova star explosion (temperature in center is $\sim 10^{11} \cdot ^\circ\text{C}$) there is the creation of the gigantic quantity of energy and the birth of the neutrino and antineutrino from the electron and positron ($e^+ + e^- \rightarrow \nu + \bar{\nu} + \gamma$), that (positrons), justly, are created from the protons of the star plasma after such increase of the temperature (with the neutro creation becoming the new star center).

12).The space curvature generally (and near the neutro stars and "Black Holes" particularly) does not have to take place because the consequences of the Theory of Relativity are not correct and during the light ray approaching to these cosmic creations there is only the interaction with the very powerful electromagnetic fields, conducting to the perturbation of the light ray movement and even to the light neutralisation.

13).The Solar System creation ($\sim 1\%$ of Sun mass) took place about 5 milliard years ago, after the explosion of the other star, the little Sun Satellite, which became the Supernova, the mass of which was transformed entirely into the mass of the planets and asteroids which are the Supernova neutro nucleus parts reserved for the initial planet agglomerations.

14). The eccentricity of all planets of the Solar Systems is due to the vertical component of the gravitational force at the new orbit (since Supernova explosion from

beginning), parallel to the Binary one (ancient), that returns the planets towards the plane of the ancient orbit of the Supernova Binary (§8).

15). The very dense pieces conserve (according Newton's Laws) the rapid rotation (spin) (created during the interaction, principally) as the parts of the nucleus (core) of the "neutronic" (of neutro) stars (the Supernova rests) where, consequently, the planets and their satellites (as Moon) and also Sun (on which the grand part of the pieces fell) have the important interior, that spin expresses in the magnetic momentum of the nucleus because of the numerous ions, absorbed on the nucleus surface due to the very strong gravitational forces and there is the strong interaction of this dipole with that of the exterior mantle rotation of the planets and Sun (§§8-10).

16). The movement of the magnetic momentum of the nucleus around the magnetic momentum of the rotation of the planets and Sun presents the precession with superpositions of the nutations where the precession movement creates the permanent magnetic force (directed more often to the interior: electric currents of the parallel magnetic dipoles) and the movement of the nutations makes the superpositions of the variability: during the approach to the magnetic momentum of the rotation there is the creation of the magnetic force to the interior (parallel currents) and during the moving away of the momenta there is the creation of the force to the exterior (antiparallel currents), that periodically interchange (§§8-10).

17). The center of dense nucleus of the planets and Sun is situated at the side (rather horizontally) from that of the exterior rest that, justly, provokes the creation of one (but not two, that is more physical) meridian zone of the stronger seismic activity as the sole "Greenwich" meridian on Sun or the zone, around and with Pacific Ocean, of the very strong volcanic activity on Earth (§§9,10).

18). The vertical magnetic forces to the interior and to the exterior (that are only proportional to the velocity of the approach of the magnetic momenta) make the vertical pressure on the surface layers of Earth (and also of Sun and the planets), but it is also the horizontal gradient of this force on the surface that is responsible for the Earthquakes, volcanic eruptions or the strong winds EL-NINO or the sunspots (of the plasma currents) and this surface gradient can be increased at the magnetic anomalies (even created) (§§9,10).

19). The vertical component of the strong magnetic field of the nucleus of the planets and Sun only indicates the velocity of the approach and moving away of the magnetic momenta during the nutation, (justly responsible for the vertical force) and consequently the powerful network of the magnetometers, measuring the evolution of this component H_z gives the necessary information for the calculations (§§9,10).

20). The magma can only really ascend at the seismic periods of the force "to the exterior", and in the case of the force "to the interior," it is the secondary effects, evidently weaker, from the surroundings, and consequently, it is the seism, near the volcan with the magnetic force to the interior that "makes sleep" the volcan for a long

time (that can be provoked also) (§10).

21). The cause of the storms (in the atmosphere and other air layers) in the equatorial direction (east or west) on the planets (including EL-NINO storms) with the strong magnetic field is due to the vertical movement of the air and water layers (due to magnetic force) and the Coriolis force of the, justly, corresponding direction (§§9,10).

22). After these common mechanisms, the sporadic jets of the charged particles of the Sun surface towards Solar System ("magnetic storms") resemble the Earthquakes, also sporadic (that can be also calculated) (§§9,10).

23). The mechanism of the process of the sunspot creation (that contain the plasma) (like, rather, the superstorms in the massive charged atmosphere of Venus) is well resolved and this process is also subordinated to the interactions of the principal magnetic dipoles: the total cycle (circle!) of the precession is ~80 years and it contains the 4 cycles of the nutation (20-22 years) (cycle of Hale) where there are the 2 nutations "on the side" ("right" and "left") and the 2 other nutations: where the distance between the momenta is "the most close" and "the most distant", that makes also the period of ~40 years and in the nutations there is one part with the approach (magnetic force to the interior) with the rotational momentum of Sun, that is followed by the moving away (also 10-11 years) (force to the exterior) (§9).

24). The Sun age is very underestimated because of the negligence of the Sun "feedings" by the moving interstellar hydrogen agglomerations in the spiral Galaxy.

25). The serious nature of the short distance propagations of the electric and gravitational force is the transformations: $e^- = \nu + \gamma$ and $e^+ = \bar{\nu} + \gamma$, wherein the omnipresent ν and $\bar{\nu}$ are transformed, very momentarily and frequently with the spheric waves, propagating frequently and rapidly, into the e^- and e^+ without the energy loss.

26). The ELECTROMAGNETIC WAVE propagation with the very astonish appearance of the electric force E vector (and of the "magnetic" force H) in the space without the charges during this propagation must take place due to the temporary and local transformations between the neutrinos (and antineutrinos) and the electrons (positrons).

27). The existence of Other Universes (invisible because of the ν and $\bar{\nu}$ absence in the interUniverse space) is proved due to the cosmic ray particles (of ultrahigh energy), which are the products of the colossal energy reaction, absent in the Our Universe.

28). Due to the great global neutrino and antineutrino (electronic) masses (having the equal masses with those of electron and positron), that are omnipresent in the Universe, the critic density of the Universe is attained and the Universe will begin, at the end, to contract (§11).

29). All light (electromagnetic waves) does not leave the Universe in reflecting (several times) at its confines, behind which there is no neutrinos and antineutrinos (electronic) and after the final consecutive contraction (of this cycle) of the Universe,

the concentration of the electromagnetic waves (with energy) must become archigigantic (in denying the 2nd Thermodynamic Law and the entropic death of Universe), justly, provoking the titanic explosion (justly Big Bang) of the extinguished masses of the Universe with this energy concentration in exploding the matter into the microsize corpuscles and consequently, the quantity of these cycles of the processes is infinite and there was (and will be) the infinite number of Big Bangs (§11).

Claim 5. The new process of the measurement of the coordinates and velocities of the particles (with charges) with the New discovered Force according to Claims 1,2,3(1) characterized in that one puts (near the scintillating screen on the particle trajectory: coordinates) the immobile charge (with the surrounding shield, except the direction near the virtual contact of the particle with the ecran) and measures the force (as that of Lorentz) of the revealing charge calibrated interactions with the moving particle charge (proportional to its, measured by this way, speed).

Claim 6. The process of the neutrino and antineutrino detections (with Neutrino Telescope included) with the neutrino and antineutrino transformations into the electrons and positrons with the electromagnetic wave energy help according to Claims 4(6,7,10), characterized in that one irradiates the neutrinos and/or antineutrinos during their movement (for instance, in perpendicular direction) with the intensive γ - rays and makes the consecutive registration (of routine) of the charged particles (as e^- , e^+).

Claim 7. The process of the preparation of the new particle neutro according to Claim 4(9) characterized in that one irradiates the protons (as hydrogen or deuterium) with the antineutrinos in purifying (if necessary) easily the neutros (created), these particles very inert and distinguished by their properties, which one can utilize as for the secondary Utilities for the experiments or the production (including the Supports of Targets to bombard) or as the receipient to stock the charged particles.

Claim 8. The process of the elemination of the electric and gravitational fields characterized in that one eliminates (or almost eliminates) the electric or gravitational field in eliminating the electronic neutrinos and antineutrinos of the corresponding surrounding space with the help of the γ -rays, transforming them into the electrons and positrons, easily eliminable /for, for instance, the Perpetual Motion Machine in separating the charges without the work and re-putting the field or for the "Flying Carpets" of the transport/ according to Claims 4(6,7).

Claim 9. The process of measurement of the changing of the inclination position or of the carrier orientation, even without any visibility is characterized in that the vectorial direction of the Earth velocity (in absolute space) serves as guide that can be found by the equipment as the Michelson's interferometer in the position of the hypersensitization according Claim 4(2) (§§7,12).

Claim 10. The process of the climate prediction (and of the weather) (with its equipment, for instance), influenced strongly by the Sun functioning /as the variable

- 59 -

quantity of the radiated energy or the spontaneous jets of the charged particles ("magnetic storms"/), characterized in that this functioning process can be calculated and measured very precisely according the mechanism of the process of the determining interactions of the magnetic momenta of the dense nucleus and the rest exterior (mantle, envelope) of the Sun according to Claims 4(15-18,22,23).

Claim 11. The process of the prediction of the seismic evolution of Earth, characterized in that this evolution can be calculated and measured very precisely according the new determining laws of the interactions of the magnetic momenta of the dense nucleus of neutro and of the exterior rest (mantle) (that must permit, for instance, to predict precisely the Earthquakes or the mortal storms EL-NINO or to know the site and the moment to make the Earth shaking (as with explosives or electric discharges) to extinguish the harmful volcanos or to create the islands in the oceans or seas /for instance with the help of the magnetic materials (as iron), increasing the magnetic force and also creating the gradient of the necessary force on the surface/) according to Claims 4(15-20) (§§9,10,12).

Claim 12. The process of the analogous explosion of the natural Big Bang, characterized in that one can imitate such explosion with the excess of the electromagnetic energy in the small volume without the neutrinos and antineutrinos at the exterior of this volume (for instance with published means of their elimination with the electric field and γ - rays) according to Claims 4(28,29) and 8.